Notice of Allowability	Application No.	Applicant(s)
	09/545,752	MOORE ET AL.
	Examiner	Art Unit
	HUNG Q. PHAM	2168
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	olication. If not included will be mailed in due course. THIS
1. This communication is responsive to <u>06/14/2004</u> .		
2. X The allowed claim(s) is/are <u>1-3,6-13,15-21,23,24 and 26-3</u>	<u>1</u> .	
 Acknowledgment is made of a claim for foreign priority una) All b) Some* c) None of the: Certified copies of the priority documents have Certified copies of the priority documents have Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received:	been received. been received in Application No	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) hereto or 2) to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the O	office action of
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t		
DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I		
 Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 06/14/2004 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material 	6. ☑ Interview Summary Paper No./Mail Date 8), 7. ☑ Examiner's Amendm	e 121905. nent/Comment int of Reasons for Allowance SHAHID ALAM
		PRIMARY EXAMINER

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 06/14/2004 was filed after the mailing date of the Non-Final Office Action on 03/10/2004. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

Applicant's arguments with respect to the rejection under 35 U.S.C. § 112, first paragraph, filed 06/14/2004 have been fully considered and are persuasive. The rejection of claims 19 and 30 has been withdrawn.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with applicants' representative, DAVID J. MCKENZIE, on 12/12/2005.

In the Claims 06/26/2003, please:

Replace

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Claims 1, 11, 17, 21 and 28 by the clean version (without underlined and crossed mark) amended by examiner as below:

(Claim 1) An apparatus for recovering a failed database data set, the apparatus comprising:

a memory device storing executable modules, the modules comprising:

a recovery utility having,

a backup copy restore utility configured to read and restore a backup copy of the failed database data set;

a merge end point utility configured to determine a merge end point reflective of a separation of detail and spill records in a log;

a change accumulation manager configured to read a change accumulation data set to derive detail records in parallel with the read and restore of the backup copy;

an image copy restore utility configured to apply the derived detail records to the backup copy during the read and restore of the backup copy to thereby create a restored database data set;

a log manager configured to read the log to derive updates subsequent to the merge end point; and

a database update manager configured to apply the derived updates to the restored database data set.

(Claim 11) A method for recovering a failed database data set, the method comprising:

providing an image copy restore utility;

providing a log manger;

reading and restoring a backup copy of the failed database data set;

reading a change accumulation data set to derive detail records associated with the failed database data set in parallel with the reading and restoring of the backup copy;

the image copy restored utility applying the derived detail records to the backup copy during the reading and restoring of the backup copy to thereby create a restored database data set;

determining a merge end point within a log;

the log manager reading the log to derive updates subsequent to the merge end point; and applying the derived updates to the restored database data set.

(Claim 17) The method of claim 11, wherein the merge end point is reflective of a separation of detail and spill records in the log.

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(Claim 21) A computer readable medium having stored thereon computer executable instructions for performing a method for recovering a failed database data set, the method comprising:

providing an image copy restore utility;

providing a log manger;

reading and restoring a backup copy of the failed database data set;

reading a change accumulation data set to derive detail records associated with the failed database data set in parallel with the reading and restoring of the backup copy;

the image copy restored utility applying the derived detail records to the backup copy during the reading and restoring of the backup copy to thereby create a restored database data set;

determining a merge end point within a log;

the log manager reading the log to derive updates subsequent to the merge end point; and applying the derived updates to the restored database data set.

(Claim 28) The computer readable medium of claim 21, wherein the merge end point is reflective of a separation of detail and spill records in the log.

Allowable Subject Matter

Claims 1-3, 6-13, 15-21, 23, 24 and 26-31 are allowed.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JEFFREY A. GAFFIN can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HUNG Q PHAM Examiner Art Unit 2168

December 19, 2005

SHAHID ALAM PRIMARY EXAMINER